

User Manual

Video Transceiver

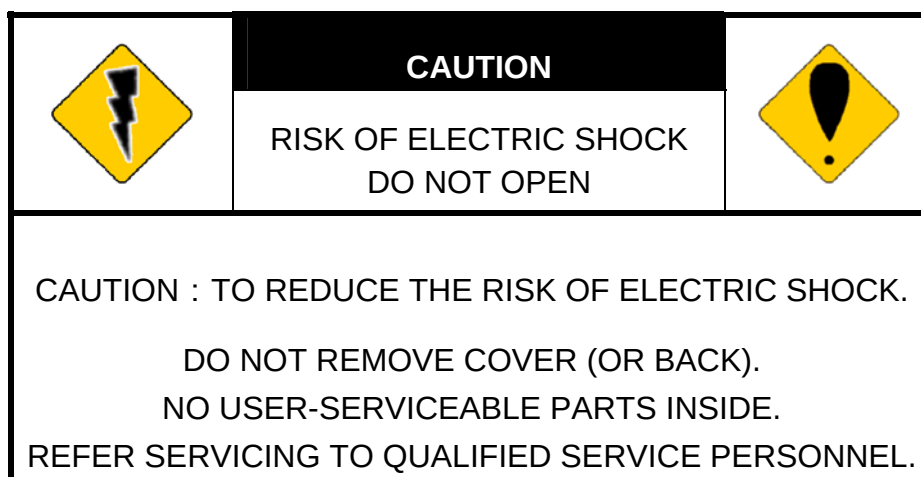


WARNINGS

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION



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PREFACE

VIDEO TRANSCEIVER provides function which is a combination of Video Server and Video decoder with IE built-in.

It encodes analogue signals of traditional cameras to digital signals; user can monitor real-time video via IE browser. H.264/MPEG4 /JPEG compression format support smooth video quality.

VIDEO TRANSCEIVER supports SD card backup to save video files and playback on any PC.

User can use VIDEO TRANSCEIVER to connect any Video Transceiver via IE browser within Internet or Intranet. It can decode MPEG4 or JPEG compression format and transfer analogue signals to TVs, CRT monitors or DVR systems.

I. Product Specifications

- 1-CH Input/Output
- H.264/ MJPEG/MPEG4 compression
- SD card backup
- 2-way audio
- Support Cell Phone/PDA/3GPP
- 3 Streaming
- Power Over Ethernet available
- SDK for Software Integration
- Wireless (Optional)
- Free Bundle 36 ch recording software

Hardware		
CPU		ARM 9 ,32 bit RISC
DDR2		256MB
Flash		16MB
Video in / Video Server		1-ch BNC type, (CBVS Camera input)
Video out / Video Decoder		1-ch BNC type (CBVS Monitor output)
Audio in/ out		1 in/ 1 out
I/O		2 in/ 2 Relay out (COM. & N.O. & N.C.) Relay Out: DC 24V@1A AC 110V@0.5A
RS-485		1, for PTZ control
RS-232		YES
Power Over Ethernet		YES (optional)
Power Consumption		DC 12V, 350mA, 4W
Dimensions		134mm (W) x 42mm (L) x 107mm (D)
Network		
Ethernet		10/ 100 Base-T
Network Protocol		HTTP, TCP/ IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP, 3GPP
Wireless (Optional)		
	Wireless	802.11b/g
	Security	WEP,WPA-PSK,WPA2-PSK
Video Encoding		
Video Resolution		NTSC - 720x480, 704x480,352x240, 176x144 PAL – 720x576, 704x576, 352x288, 176x144
Video adjust		Brightness, Contrast, Saturation, Hue, Sharpness
Triple Streaming		Yes
Image snapshot		Yes
Compression format		H.264/ JPEG/ MPEG4 (3GPP only)
Video bitrates adjust		CBR, VBR
Motion Detection		Yes, 3 different areas
Privacy Mask		Yes, 3 different areas
Video Decoding		
Video Output Resolution		D1/ VGA/ CIF/ QCIF
Decompression Format		H.264/ MJPEG/MPEG4(3GPP only)

TV Out		Yes
Output OSD		Yes
Remote IPCAM Rotation		Yes. 10 Channels
Stream Server		IP Camera, Video Server
System		
Full screen monitoring		Yes
Triggered action		Mail, FTP, Save to SD card, Relay
Pre/ Post alarm		Yes, configurable
Security		Password protection
Firmware upgrade		HTTP mode, can be upgraded remotely
Simultaneous connection		Up to 10
Audio		Yes, 2-way
SD card management		
Recording trigger		Motion Detection, IP check, Network break down (wire only), schedule, Alarm
Video format		AVI, JPEG
Video playback		Yes
Delete files		Yes
Web browsing requirement		
OS		Windows 2000, XP, 2003, Microsoft IE 6.0 or above
Hardware	Suggested	Intel Dual Core 1.66G, RAM: 1024MB, Graphic card: 128MB
	Minimum	Intel-C 2.8G, RAM: 512MB, Graphic card: 64MB

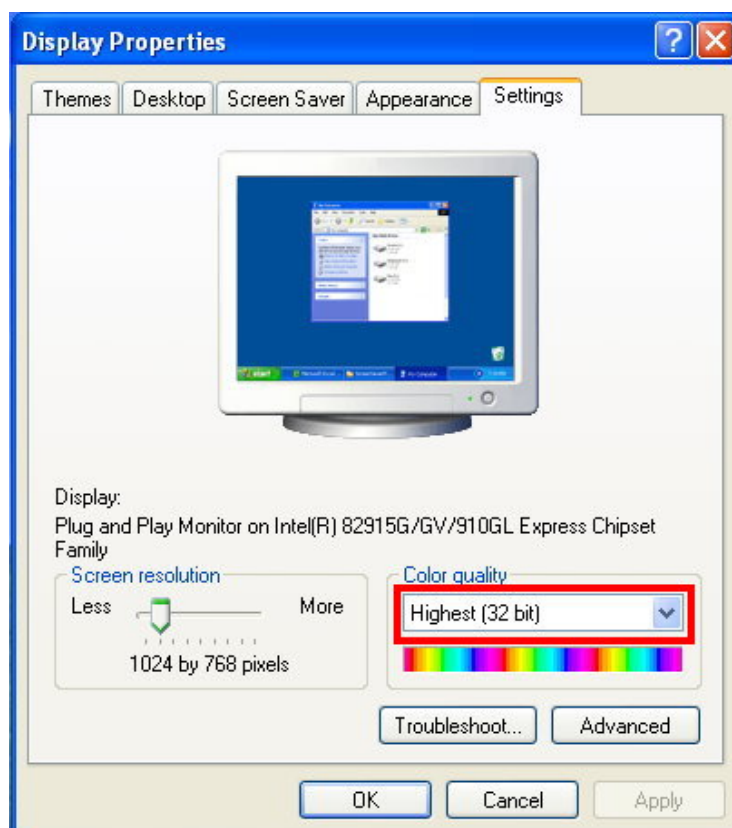
II. Product Installation

A. Monitor Setting

- i. Right-Click on the desktop. Select “ Properties”



- ii. Change color quality to highest (32bit).



B. Hardware Installation

B-1: Hardware Connection

- i. Connect power adaptor

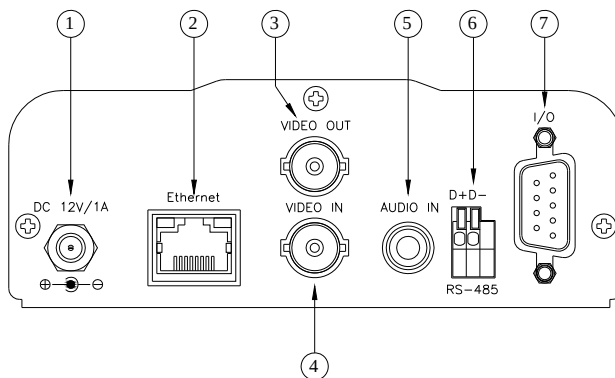


- ii. Connect Video Transceiver to PC or network with Ethernet cable

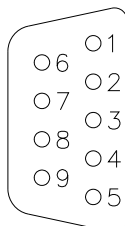


- iii. Set up the network configurations according to the network environment.
For further explanation, please refer to chapter VI, "Network Configuration for Video Server".

B-2: Front plane assignment



1. Power Supply (DC 12V)
2. Ethernet (RJ-45)
3. VIDEO OUT BNC JACK
4. VIDEO IN BNC JACK
5. AUDIO IN RCA JACK
6. RS-485 / PTZ header.
7. GPIO I/O



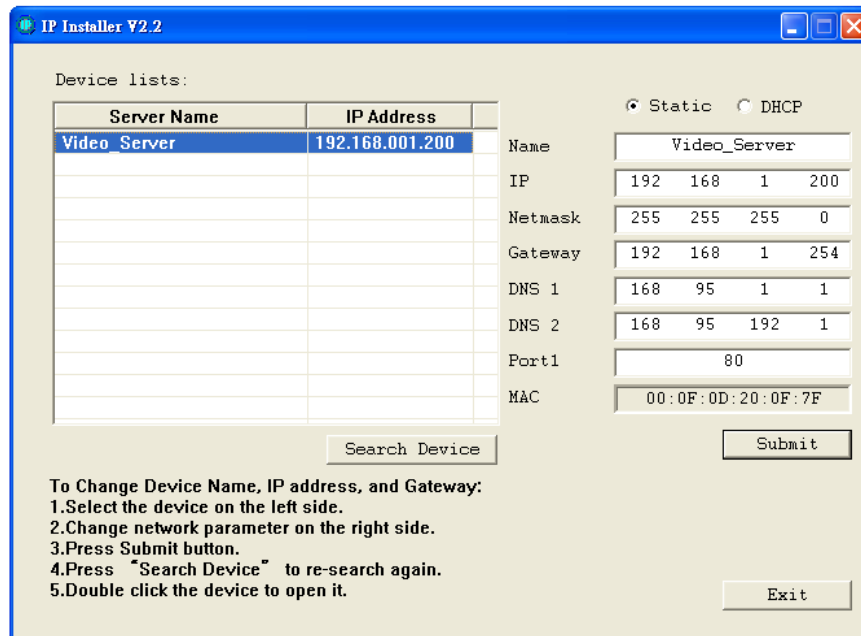
- | | | |
|-----------|------------|------------|
| 1. 12V | 4. X | 7. OUTPUT2 |
| 2. ALARM1 | 5. GND | 8. OUTPUT3 |
| 3. ALARM2 | 6. OUTPUT1 | 9. OUTPUT4 |

C. IP Assignment

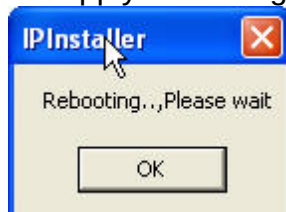
- i. Use the software, “IP Installer” to assign the IP address of Video Transceiver. The software is in the attached software CD.
- ii. There are two languages for the IP installer
 - i. IPInstallerCht.exe : Chinese version
 - ii. IPInstallerEng.exe : English version
- iii. There are 3 kinds of IP configuration.
 - i. Fixed IP (Public IP or Virtual IP)
 - ii. DHCP (Dynamic IP)
 - iii. Dial-up (PPPoE)
- iv. Execute IP Installer
- v. For Windows XP SP2 user, it may popup the following message box. Please click “Unblock”.



- vi. IP Installer configuration :



- vii. IP Installer will search all IP Devices connected on Lan. The user can click "Search Device" to search again.
- viii. Click the Video Transceiver listed on the left side. The network configuration of this Video Server will show on the right side. You may change the "name" of the Video Server to your preference (eg: Office, warehouse). Change the parameter and click "Submit" then click "OK". It will apply the change and reboot the Device.



- ix. Please make sure the subnet of PC IP address and Video this IP product IP address are the same.

The same Subnet:

IP product IP address: 192.168.1.200

PC IP address: 192.168.1.100

Different Subnets:

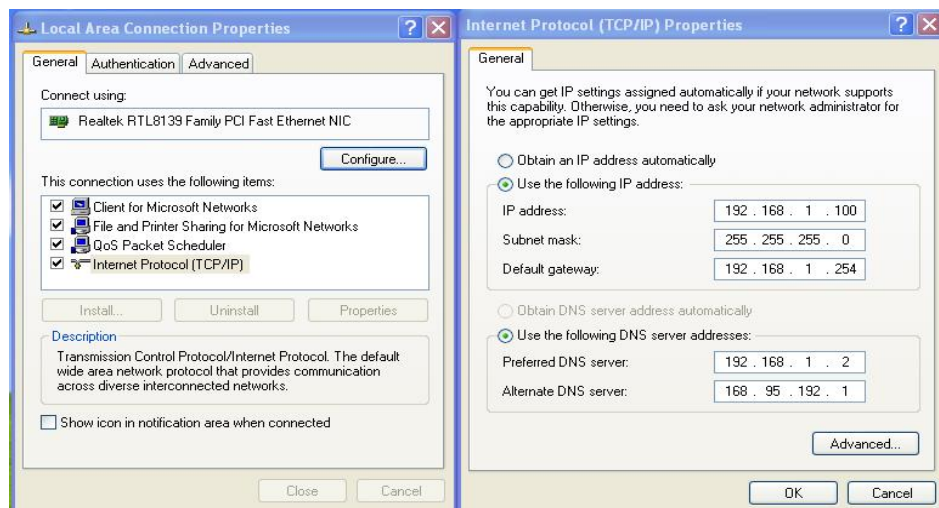
IP product IP address: 192.168.2.200

PC IP address: 192.168.1.100

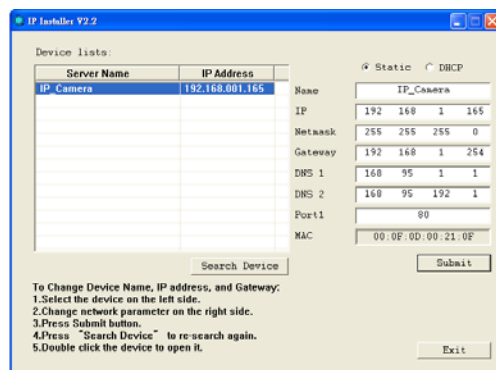
To Change PC IP address:

Control Panel→Network Connections→Local Area Connection Properties→Internet Protocol (TCP/IP) →Properties

Please make sure this IP product and PC have the same Subnet. If not, please change this IP product subnet or PC IP subnet accordingly.



- x. A quick way to access remote monitoring is to left-click the mouse twice on a selected IP products listed on “Device list” of IP Installer. An IE browser will be opened.



- xi. Then, please key in the default “user name: admin” and “password: admin”.



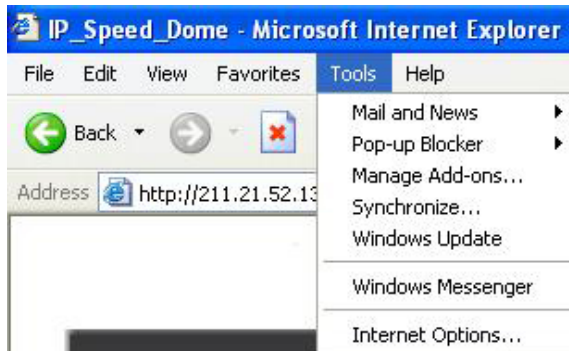
D. Install ActiveX control:

For the first time to view the video via IE, it will ask you to install the ActiveX component.

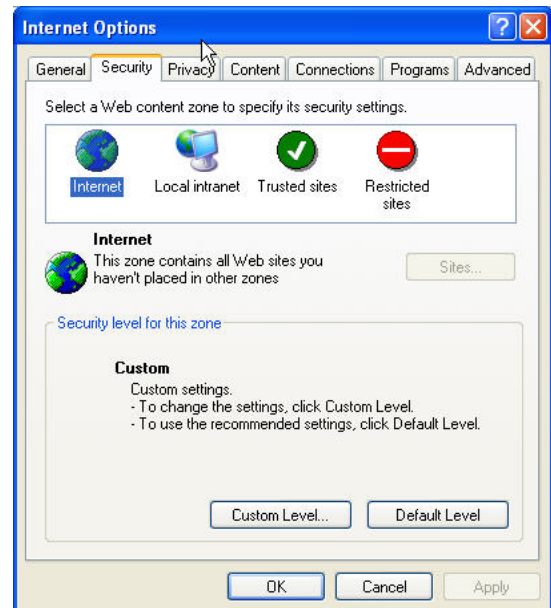
If the installation failed, please check the security setting for the IE browser.

- i. IE → Tools → Internet Options... → Security Tab → Custom Level... → Security Settings → Download unsigned ActiveX controls → Select “Enable” or Prompt.
- ii. IE → Tools → Internet Options... → Security Tab → Custom Level... → Initialize and script ActiveX controls not marked as safe → Select “Enable” or Prompt.

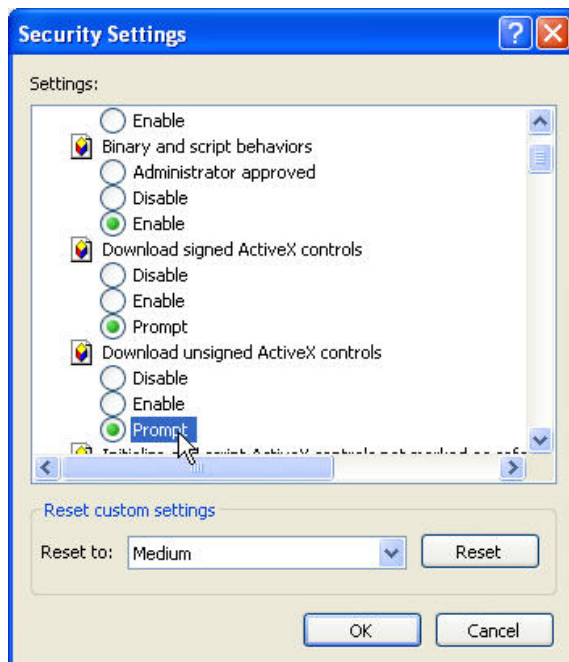
1



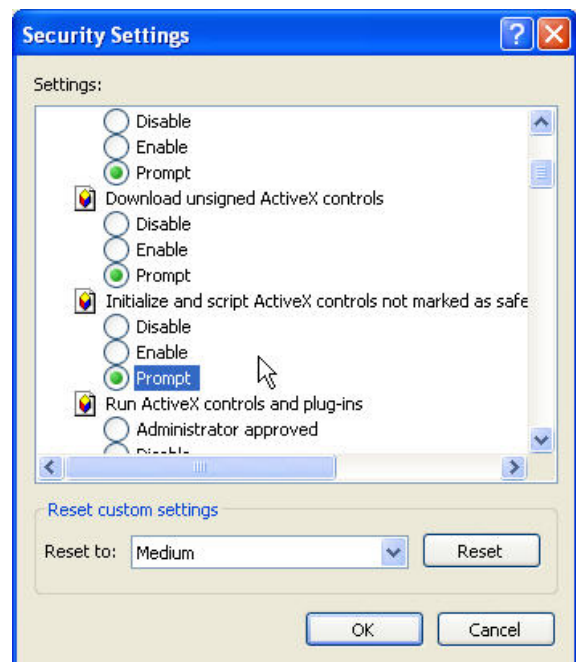
2



3

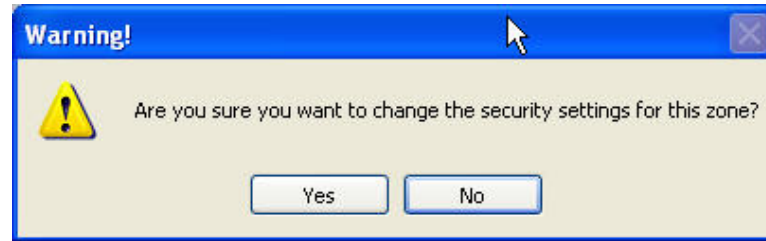


4



5

When popup the following dialogue box, click “Yes”.



III. Live Video

Start a IE browser, type the IP address of this IP product in the address field. It will show the following dialogue box. Key-in the user name and password. The default user name and password are "**admin**" and "**admin**".



When connect to this IP product。 The following program interface shows.



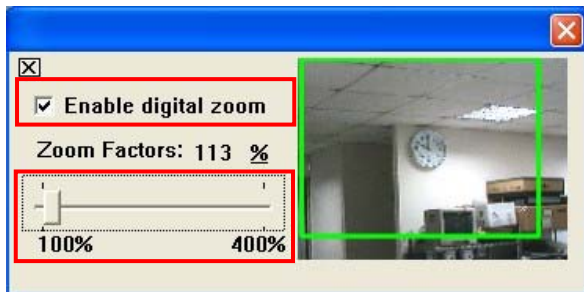
1.  : Get into the administration page
 2.  : Video Snapshot
 3. Show system time, video resolution, and video refreshing rate
 4. Select video streaming source (When streaming 2 setting in 『Video Setting』 is closed, this function will not display)
 5. Video Transceiver supports 2-way audio. Click the “Chatting” check box. Then you can use microphone which connect to the PC to talk to server side, which is Video Server side.
 6. Control the relay which is connected to this Video Transceiver
- Double-click the video, it will change to full screen mode. Press “Esc” or double-click the video again, it will change back to normal mode.

Right-Click the mouse on the video, it will show a pop-up menu.

Snapshot
Record Start
Mute
Full Screen
Zoom

1. Snapshot : Save a JPEG picture

2. Record Start : Record the video in the local PC. It will ask you where to save the video. To stop recording, right-click the mouse again. Select "Record Stop". The video format is AVI. Use Microsoft Media Player to play the recorded file.
3. Mute : Turn of the audio. Click again to turn on it.
4. Full Screen : Full-screen mode.
5. Zoom : Enable zoom-in and zoom-out functions. Select "Enable digital zoom" option first within the pop-up dialogue box and then drag and drop the bar to adjust the zoom factors.



IV. Video Transceiver Configuration



Click  to get into the administration page. Click  to go back to the live video page.





System

System Information

User Management

System Update



Network

IP Setting

PPPoE

DDNS

Mail & FTP



AV Setting

Image Setting

Receiver Setting

Video Setting

Audio



Event

Event Setting

Schedule

I/O Setting

Log List

SD Card

System Information

Server Information

MAC Address:

Server Name: ☐ Status Bar

LED Indicator: ☒ ON ☐ OFF

Language : ☒ English ☐ 繁體中文 ☐ 简体中文 ☐ French
☐ Russian ☐ Italian ☐ Spanish ☐ German
☐ Polish

OSD Setting

Time Stamp: ☐ Enabled ☒ Disabled

Text: ☐ Enabled ☒ Disabled

OSD_Display [Text Edit](#)

Time Setting

Server Time: 2010/9/2 17:15:55 Time Zone: GMT+08:00

Date Format: ☒ yy/mm/dd ☐ mm/dd/yy ☐ dd/mm/yy

Time Zone:

☐ NTP :

NTP Server :

Update : ☒ Hour

Time Shift : Minutes [-1440..1440]

☐ Synchronize with PC's time

Date :

Time :

☐ Manual

Date :

Time :

☒ The date and time remain the same

A. System Information

i、 System Information :

- a. Server Information : Set up the camera name, select language, and set up the camera time.

1. Server Name : This is the Camera name. This name will show on the IP Installer.
2. Select language : There are English, Traditional Chinese, and Simplified Chinese to select. When change, it will show the following dialogue box for the confirmation of changing language.



- b. Server time setting : Select options to set up time - "NTP", "Synchronize with PC's time", "Manual", and "The date and time remain the same".

Time Setting

Server Time: 2007/4/11 14:56:01 Time Zone: GMT+08:00

Date Format:
☒ yy/mm/dd
☐ mm/dd/yy
☐ dd/mm/yy

Time zone:

GMT+08:00

☒ NTP :

GMT-09:00

GMT-08:00

GMT-07:00

GMT-06:00

GMT-05:00

GMT-04:00

GMT-03:30

GMT-03:00

GMT-02:00

GMT-01:00

GMT-00:00

GMT+01:00

GMT+02:00

GMT+03:00

GMT+03:30

GMT+04:00

GMT+04:30

GMT+05:00

☐ Synchronize

Date :
Time :

☐ Manual

Date :
Time :

☐ The date and time are the same

Apply

ii、 User Management

VIDEO TRANSCIVER supports three different users, administrator, general user, and anonymous user.

The screenshot shows the 'User Management' web interface. At the top, there's a header 'User Management'. Below it, a section titled 'Anonymous User Login' contains two radio buttons: 'YES' and 'NO'. The 'NO' button is selected. To the right of these buttons is a 'Setting' button. Below this section is an 'Add User' section with three input fields: 'Username:', 'Password:', and 'Confirm:'. To the right of these fields is an 'Add/Set' button. At the bottom, there's a 'User List' section with a table. The table has four columns: 'Username', 'User Group', 'Modify', and 'Remove'. The first row of the table shows 'admin' as the username and 'Administrator' as the user group. The 'Modify' column for 'admin' contains the text 'Edit'.

Username	User Group	Modify	Remove
admin	Administrator	Edit	

a. Anonymous User Login :

Yes : Allow anonymous login

No : Need user name & password to access this Video Transceiver

b. Add user :

Type the user name and password, then click "Add/Set".

Note: Allow guest to login as a Guest. Guest is only allowed to browse the page.

c. Click "edit" or "delete" to modify the user.

The screenshot shows a Microsoft Internet Explorer window titled 'User_Setting - Microsoft Internet Explorer'. The main content area is titled 'User Setup'. It contains three input fields: 'Username:' with the text 'admin', 'Password:', and 'Confirm:'. To the right of these fields is an 'OK' button.

iii、 System update :

The screenshot shows a web interface titled "System Update". It contains four main sections: "Firmware Upgrade", "Reboot System", "Factory Default", and "Setting Management".

- Firmware Upgrade:** Shows "Firmware Version: V3.2.20". Below it is a "New Firmware:" field with a "浏览..." (Browse...) button and an "Upgrade" button.
- Reboot System:** Features a "Start" button.
- Factory Default:** Features a "Start" button.
- Setting Management:** Includes a text instruction: "Right click the mouse button on Setting Download and then select Save As to save current system's setting in the PC." Below this is a "New Setting File:" field with a "浏览..." (Browse...) button and an "Upgrade" button.

- a. To update the firmware online, click "Browse..." to select the firmware. Then click "Upgrade" to proceed.
- b. Reboot system : re-start the Video Transceiver
- c. Factory default : delete all settings and restore defaults system.
- d. Setting Management : User may download the current setting to PC, or upgrade from previous saved setting.
 1. Setting download:
Right-click the mouse button on Setting Download → Select "Save AS..." to save current IP CAM setting in PC → Select saving directory → Save
 2. Upgrade from previous setting
Browse → search previous setting → open → upgrade → Setting update confirm → click [index.html](#). to return to main page

B.Network

i. IP Setting

Video Transceiver supports DHCP and static IP.

IP Setting	
IP Assignment	
☐ DHCP	
☒ Static	
IP Address:	192.168.1.200
Subnet Mask:	255.255.255.0
Gateway:	192.168.1.254
DNS 0:	168.95.1.1
DNS 1:	168.95.192.1
Port Assignment	
Web Page Port:	80
RTSP Port :	554
RTP Start Port:	5000 [1024..10000]
RTP End port:	9000 [1025..10000]
UPnP	
UPnP:	☒ Enabled ☐ Disabled
Apply	

- a. DHCP : Using DHCP, Video Transceiver will get all the network parameters automatically.
- b. Static IP : Please type in IP address, subnet mask, gateway, and DNS manually.
- c. Port Assignment: user may need to assign different port to avoid conflict when setting up IP assignment.
 1. Web Page Port: setup web page connecting port and video transmitting port (Default: 80)
 2. RTSP Port: setup port for RTSP transmitting (Default: 554)
 3. RTP Start and End Port: in RTSP mode, you may use TCP and UDP for connecting. TCP connection uses RTSP Port (554). UDP connection uses RTP Start and End Port.

d. UPnP

This Video Transceiver supports UPnP, If this service is enabled on your computer, the camera will automatically be detected and a new icon will be added to "My Network Places."

Note: UPnP must be enabled on your computer.

Please follow the procedure to activate UPnP

1. open the Control Panel from the Start Menu
2. select Add/Remove Programs
3. Select Add/Remove Windows Components and open Networking Services section
4. Click Details and select UPnP to setup the service
5. The IP device icon will be added to "MY Network Places"
6. User may double click the IP device icon to access IE browser

ii、 PPPoE :

PPPoE Setting

☐ Enabled ☒ Disabled

Username:

Password:

Send mail after dialed

☐ Enabled

Subject:

Select "Enabled" to use PPPoE.

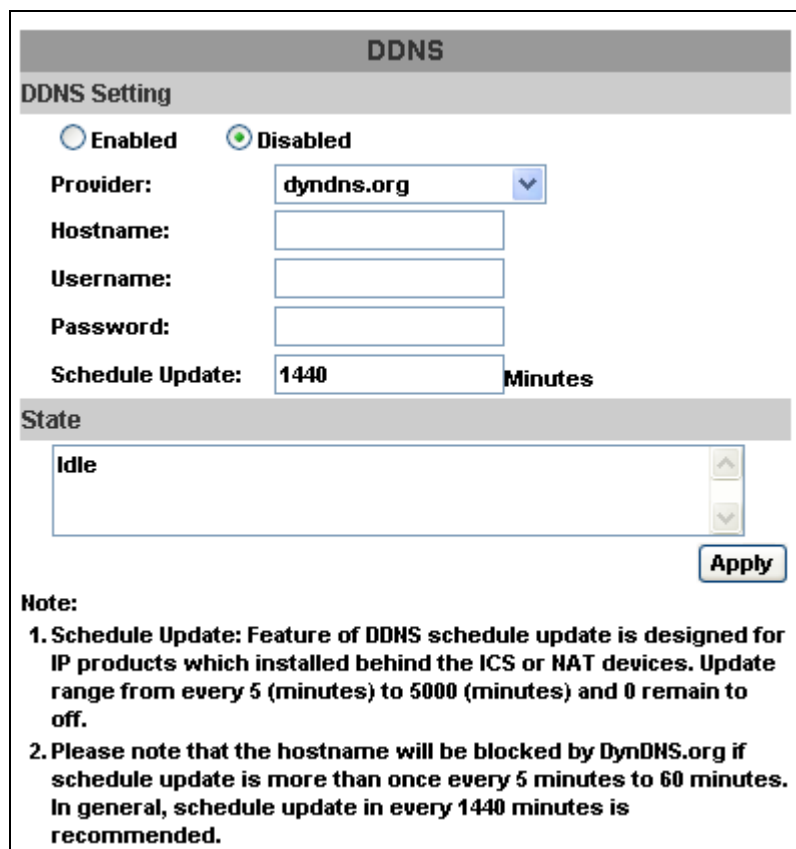
Key-in Username and password for the ADSL connection.

Send mail after dialed : When connect to the internet, it will send a mail to a specific mail account. For the mail setting, please refer to "Mail and FTP" settings.

iii、 DDNS :

Video Transceiver supports DDNS (Dynamic DNS) service.

a. DynDNS :



DDNS

DDNS Setting

☐ Enabled ☒ Disabled

Provider:

Hostname:

Username:

Password:

Schedule Update: Minutes

State

Apply

Note:

1. Schedule Update: Feature of DDNS schedule update is designed for IP products which installed behind the ICS or NAT devices. Update range from every 5 (minutes) to 5000 (minutes) and 0 remain to off.

2. Please note that the hostname will be blocked by DynDNS.org if schedule update is more than once every 5 minutes to 60 minutes. In general, schedule update in every 1440 minutes is recommended.

1. Enable this service
2. Key-in the DynDNS server name, user name, and password.
3. Set up the IP Schedule update refreshing rate.
4. Click “Apply”
5. If setting up IP schedule update too frequently, the IP may be blocked. In general, schedule update every day (1440 minutes) is recommended.

b. Camddns service :

DDNS

DDNS Setting

☐ Enabled ☒ Disabled

Provider:

Username:

Schedule Update: Minutes

State

Apply

Note:
1. Schedule Update: Feature of DDNS schedule update is designed for IP products which installed behind the ICS or NAT devices. Update range from every 5 (minutes) to 5000 (minutes) and 0 remain to off.
2. Please note that the hostname will be blocked by DynDNS.org if schedule update is more than once every 5 minutes to 60 minutes. In general, schedule update in every 1440 minutes is recommended.

1. Please enable this service
2. Key-in user name.
3. IP Schedule update is default at 5 minutes
4. Click "Apply".

c. DDNS Status

1. Updating : Information update
2. Idle : Stop service
3. DDNS registration successful, can now log by
<http://<username>.ddns.camddns.com> : Register successfully.
4. Update Failed, the name is already registered : The user name has already been used. Please change it.
5. Update Failed, please check your internet connection : Network connection failed.
6. Update Failed, please check the account information you

provide : The server, user name, and password may be wrong.

iv、 Mail & FTP

To send out the video via mail of ftp, please set up the configuration first.

Mail & FTP	
Mail Setting	
Mail Server:	
Username:	
Password:	
Sender's Mail:	
Receiver's Mail:	
Bcc Mail:	
FTP Setting	
FTP Server:	
Username:	
Password:	
Port:	21
Path:	/
Apply	

v、 Wireless Setting (Wireless Network Optional)

Supports 802.11 b/g wireless connection.

Notice : Wireless network and Ethernet network use the same IP, the user has to unplug Ethernet cable, if Ethernet cable is not unplug, wireless setting can not be executed.

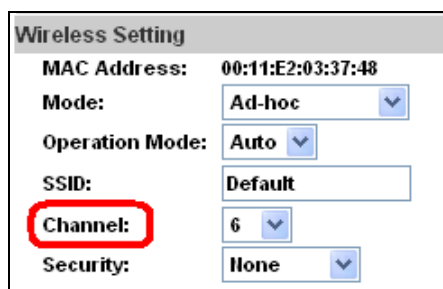
Wireless Setting			
Status of Wireless Networks			
SSID	Mode	Security	Signal strength
allan	Infrastructure	WPA	79
RHOSON	Infrastructure	WEP	16
Link	Infrastructure	OFF	16
SinoStar	Infrastructure	WEP	11
7f-2	Infrastructure	WEP	12
00160159A7FA	Infrastructure	WEP	56
RDTEST	Infrastructure	WEP	48
3Com	Infrastructure	OFF	43
Default	Infrastructure	WPA	74
Wireless Setting			
MAC Address:	00:16:16:16:DD:E1		
Mode:	Infrastructure		
Operation Mode:	Auto		
SSID:	allan		
Security:	None		
Apply			

a. Status of Wireless Networks :

scan all wireless services.

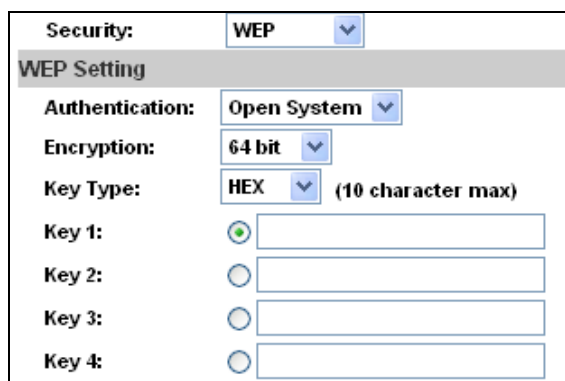
b. Wireless Setting :

1. **Mode** : There are Infrastructure and Ad-hoc. Infrastructure is for connecting with the router. Ad-hoc is for connecting with PC. There is “Channel” to select only when user uses Ad-hoc mode.
e.g. If one PC’s channel is 1, the other’s channel has to be 1, too.



The image shows a 'Wireless Setting' window. It contains the following fields: 'MAC Address' with the value '00:11:E2:03:37:48', 'Mode' set to 'Ad-hoc', 'Operation Mode' set to 'Auto', 'SSID' set to 'Default', 'Channel' set to '6' (this field is circled in red), and 'Security' set to 'None'.

2. **SSID** : Based on AP setting.
3. **Channel** : This is used only when the user selects Ad-hoc mode in order to avoid conflict.
4. **Security** : It supports “None”, “WEP”, “WPA-PSK” security encryption based on the setting of the Router.
5. **WEP** :



The image shows a 'WEP Setting' window. It contains the following fields: 'Security' set to 'WEP', 'Authentication' set to 'Open System', 'Encryption' set to '64 bit', 'Key Type' set to 'HEX' (with a note '(10 character max)'), and four key input fields labeled 'Key 1:', 'Key 2:', 'Key 3:', and 'Key 4:'. The 'Key 1' field has a green dot next to it, while the others have radio buttons.

- **Authentication** : There are Open System and Shared Keys, it is based on different encryptions. This has to be the same as the Router’s setting.

- Encryption : There are 64 bits and 128 bits. This is based on Key Type based on the Router's setting.
- Key Type : There are HEX and ASCII. When selecting HEX, the user only can input 0~9 characters and use A, B, C, D, E, and F.
- When selecting ASCII, the user can input any character.
(Case sensitive)
- Key 1~4 : Based on Key Type to input characters.

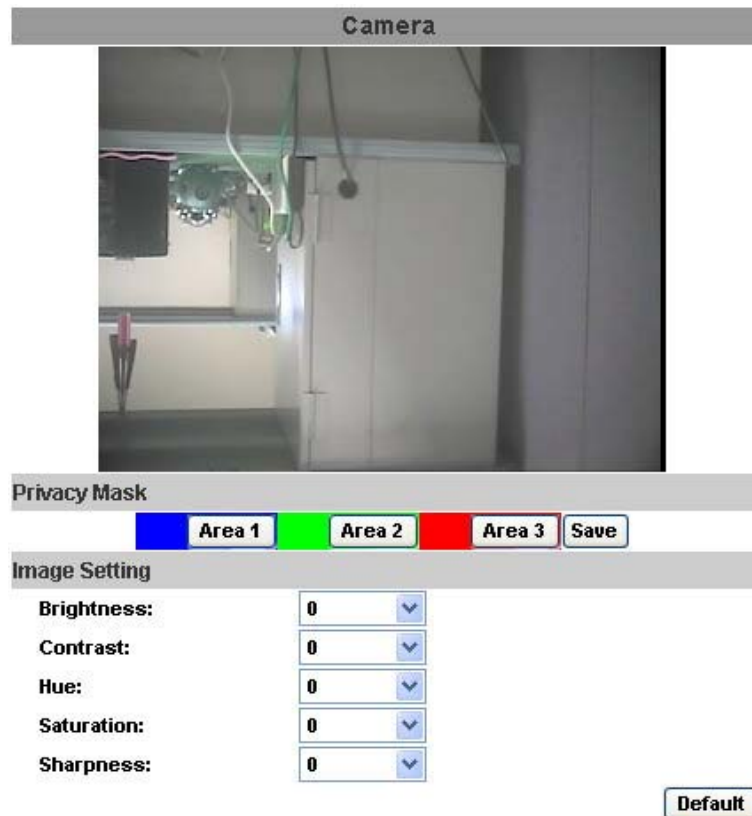
6. **WPA-PSK :**

Security:	WPA-PSK ▼
WPA-PSK Setting	
Encryption	TKIP ▼
Pre-Shared Key:	(ASCII format, 8~63)

- Encryption : There are TKIP and AES.
- Pre-Shared Key : Allow any characters. (Case sensitive)

C.A/V Setting

i、 Image setting



The screenshot displays the IP Camera web interface. At the top, there is a 'Camera' header. Below it is a live video feed showing an indoor scene. Under the video feed is the 'Privacy Mask' section, which includes three colored buttons: 'Area 1' (blue), 'Area 2' (green), and 'Area 3' (red), along with a 'Save' button. Below this is the 'Image Setting' section, which contains five sliders: 'Brightness', 'Contrast', 'Hue', 'Saturation', and 'Sharpness'. Each slider is currently set to 0. A 'Default' button is located at the bottom right of the settings section.

For the security purpose, there are three areas can be setup for privacy mask. Click Area button first and pull a area on the above image. Finally, click Save button to reserve the setting.

Adjust "Brightness", "Contrast", "Hue", "Saturation" to get clear video.

ii、 Video Receiver Setting

a. TV Output

Use the drop down list to select the TV system of the connected IPCAM. There are NTSC and PAL two modes.

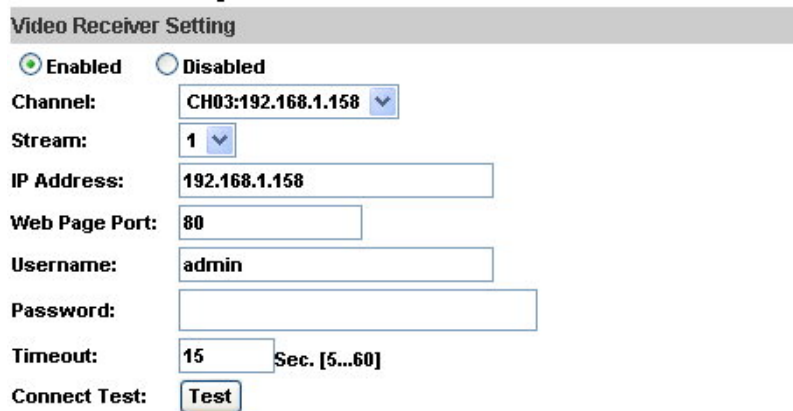
The size of the camera image can be selected. (Full Size/ Original Size.)



The interface shows a grey header bar with the text "Receiver Setting". Below it, the "TV Output:" label is followed by a dropdown menu currently set to "NTSC". Underneath, there are two radio buttons: "Full Size" (which is unselected) and "Original Size" (which is selected).

b. Video Transceiver Setting

1. Channel: There are 10 IPCAMs can be connected.
2. Stream: When the connected device is 4CH Video Server, the user can select the image (channel) of the video server.
3. IP Address: Input the IP address of remote IPCAM
4. Web Page Port: default port is 80
5. Username: input remote IP device username
6. Password: input remote IP device password
7. Timeout: User can select time of the timeout (5 to 60 sec.)
8. Connect Test: Click "Test" button to verify the IPCAM setting.



The interface has a grey header bar with the text "Video Receiver Setting". Below it, there are two radio buttons: "Enabled" (selected) and "Disabled" (unselected). The settings are as follows: "Channel:" is a dropdown menu showing "CH03:192.168.1.158"; "Stream:" is a dropdown menu showing "1"; "IP Address:" is a text input field containing "192.168.1.158"; "Web Page Port:" is a text input field containing "80"; "Username:" is a text input field containing "admin"; "Password:" is an empty text input field; "Timeout:" is a text input field containing "15" followed by the text "Sec. [5...60]"; and "Connect Test:" is a button labeled "Test".

c. Auto Switch Setting

User can enable or disable auto switch function.

Moreover, user uses the check box to select the channels which are enable "Auto Switch". Insert "Stop Time" can setup the interval time of auto switch function.

Auto Switch Setting

☒ Enabled ☐ Disabled

Channel: ☒ CH1 ☐ CH2 ☒ CH3 ☐ CH4 ☐ CH5
☒ CH6 ☐ CH7 ☒ CH8 ☐ CH9 ☒ CH10

Stop Time: Sec. [5...60]

d. Audio Receiver Setting

Enable or Disable the audio of the connected IPCAM.

Audio Receiver Setting

☐ Enabled ☒ Disabled

e. Output Overlay Setting

Enable or disable overlay.

Adjust the time which is according to the local (PC) time or the received time of the connected IPCAM.

Select the date format which includes yy/mm/dd, mm/dd/yy and dd/mm/yy three varieties.

Select the OSD position of the IPCAM.

Output Overlay Setting

☐ Enabled ☒ Disabled

Time: ☐ Local ☒ Based on Received

Date Format: ☒ yy/mm/dd ☐ mm/dd/yy ☐ dd/mm/yy

Position: ☐ Top ☒ Bottom

iii、 Video Setting

This Mode enables Video Transceiver to be used as a Video Server to sent out audio/video thru network

This setting is for Video Server video format setting and not for Video Decoder video format setting.

Video Decoder video format setting is depending on remote incoming video source.

Video Transceiver supports Dual Streaming, it only supports Dual Streaming under Video Server mode

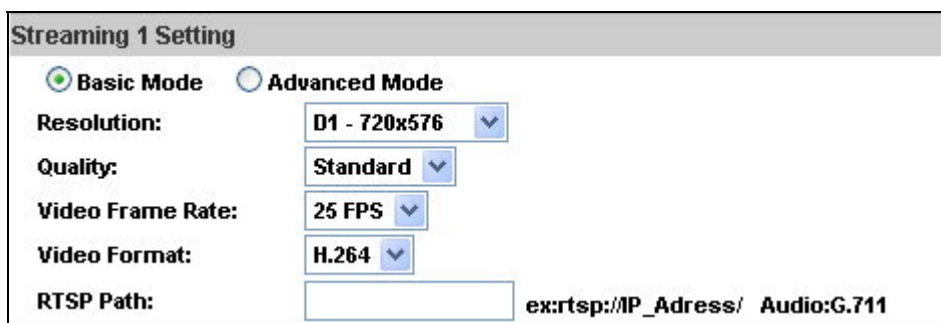
User may select 2 streaming output simultaneously:

Streaming 1 Setting: Basic mode and Advanced mode

Streaming 2 Setting: Basic mode, Advanced mode, and 3GPP mode

(Max Video Frame Rate for both streaming combined is 30 FPS)

a. Streaming 1 Basic Mode :



Streaming 1 Setting

☒ Basic Mode ☐ Advanced Mode

Resolution: D1 - 720x576

Quality: Standard

Video Frame Rate: 25 FPS

Video Format: H.264

RTSP Path: ex:rtsp://IP_Address/ Audio:G.711

1. Resolution :

There are 4 resolutions to choose.

NTSC / PAL

D1 – 720×480 / 720×576

4CIF – 704×480 / 704×576

CIF – 352×240 / 352×288

QCIF – 176×120 / 176×144

2. Quality :

There are 5 levels to adjust:

Best/ High/ Standard/ Medium/ Low

The higher the quality is, the bigger the file size is.

Also not good for internet transmitting

3. Video Frame Rate : The video refreshing rate per second.

4. Video Format : H.264 or JPEG.

5. RTSP Path: RTSP output name

b. Streaming 1 Advanced Mode :

Streaming 1 Setting

☐ Basic Mode ☒ **Advanced Mode**

Resolution: D1 - 720x576

Bitrate Control Mode: ☒ CBR ☐ VBR

Video Quantitative: 7

Video Bitrate: 1Mbps

Video Frame Rate: 25 FPS

GOP Size: 1 X FPS GOP = 25

Video Format: H.264

RTSP Path: ex:rtsp://IP_Address/ Audio:G.711

1. Resolution :

There are 4 resolutions to choose.

NTSC / PAL

D1 – 720×480 / 720×576

4CIF – 704×480 / 704×576

CIF – 352×240 / 352×288

QCIF – 176×120 / 176×144

2. Bitrate Control Mode

There are CBR(Constant Bit Rate) and VBR(Variable Bit Rate) to use.

CBR : 32Kbps~4Mbps – Increase CBR to increase the picture quality; vise versa

VBR : 1(Low)~10(High) – Compression rate, the higher the compression rate, the lower the picture quality is; vise versa. The balance between VBR and network bandwidth will affect picture quality. Please carefully select the VBR rate to avoid picture breaking up or lagging.

3. Video Frame Rate

Picture display frame per second

NTSC: Max 30 frames/second PAL: Max 25 frames/second

4. GOP Size

It means "Group of Pictures". The higher the GOP is, the better the quality is.

5. Video Format :

There are 2 Video Format to choose

H.264 or JPEG.

6. RTSP Path: RTSP output connecting route

c. Streaming 2 Basic Mode :

Streaming 2 Setting	
☒ Basic Mode	☐ Advanced Mode
Resolution:	4CIF - 704x576
Quality:	Standard
Video Frame Rate:	25 FPS
Video Format:	JPEG
RTSP Path:	v2 ex:rtsp://IP_Address/v2 Audio:G.711

1. Resolution :

There are 4 resolutions to choose.

NTSC / PAL

D1 – 720×480 / 720×576

4CIF – 704×480 / 704×576

CIF – 352×240 / 352×288

QCIF – 176×120 / 176×144

2. Quality :

There are 5 levels to adjust:

Best/ High/ Standard/ Medium/ Low

The higher the quality is, the bigger the file size is. Also not good for internet transmitting

3. Video Frame Rate

Picture display frame per second

4. Video Format : H.264 or JPEG

5. RTSP Path: RTSP output connecting route

d. Streaming 2 Advanced Mode :

1. Resolution :

There are 4 resolutions to choose.

NTSC / PAL

D1 – 720×480 / 720×576

4CIF – 704×480 / 704×576

CIF – 352×240 / 352×288

QCIF – 176×120 / 176×144

2. Quality:

There are 5 levels to adjust:

Best/ High/ Standard/ Medium/ Low

The higher the quality is, the bigger the file size is. Also not good for internet transmitting

3. Video Frame Rate

The video refreshing rate per second.

4. Video Format : H.264 or JPEG

5. RTSP Path: RTSP output name

e. 3GPP Streaming Setting:

3GPP Streaming Setting

☐ Enabled
 ☒ Disabled (Resolution=176x144, FPS=5, Format=MPEG4)

3GPP Path:
 ex:rtsp://<>/3g Audio:AMR
 ex:rtsp://<>/3gx No Audio

Apply

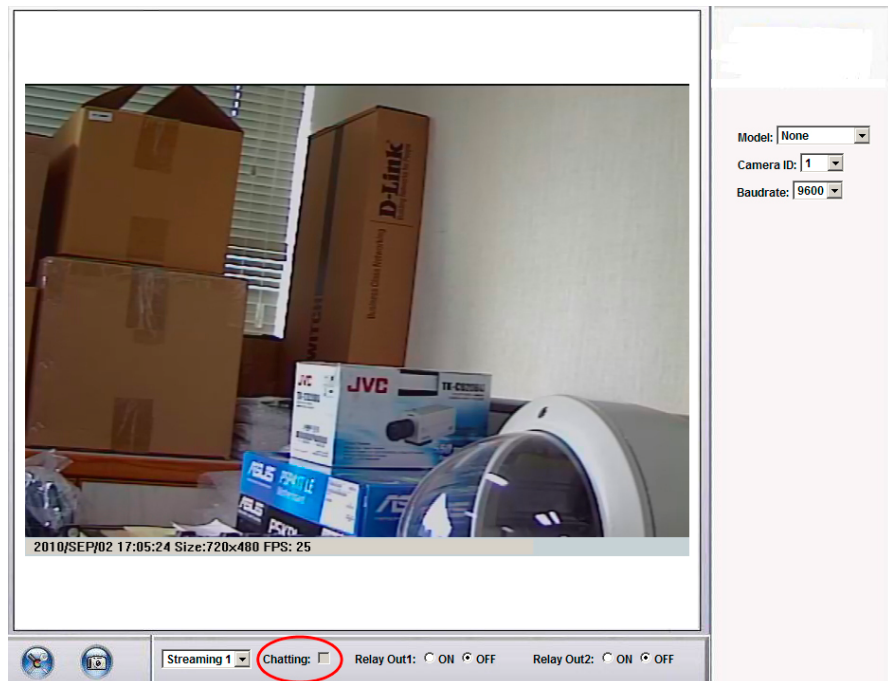
3GPP mode suggested setting: 176x144 resolution, 5FPS, MPEG4 format

1. Enable or Disable 3GPP Streaming
2. 3GPP: 3GPP output name

iv. Audio :

a. Audio receive and output

1. Video Server Mode (two-way audio):
 - i. By Selecting “Chatting” on IE page enables Video Transceiver to receive audio from remote PC, and audio can be output thru “Audio Out” in Video Transceiver



2. Video Decoder/Transceiver Mode:

- i. Receive audio from remote IP cam/Video Server, and output audio from “Audio Out” in Video Transceiver

b. Local Audio Capture and Transmit

1. Enable Audio "IP Camera to PC" will capture audio from device connected to Video Transceiver and transmit the audio to remote PC thru network

Audio	
IP Camera to PC	
☒ Enabled	☐ Disabled
Apply	

D.Event

Video Transceiver provides multiple event settings.

i、 Event Setting

Event Setting

Motion Detection

Area Setting:

Sensitivity: 5

Area 1: ☐ E-mail ☐ FTP ☐ Out1 ☐ Out2 ☐ Save to SD card

Area 2: ☐ E-mail ☐ FTP ☐ Out1 ☐ Out2 ☐ Save to SD card

Area 3: ☐ E-mail ☐ FTP ☐ Out1 ☐ Out2 ☐ Save to SD card

Subject: Server Warning!

Interval: 10 sec a period of time between every two motions detected.

☐ Based on the schedule

Record File

File Format: AVI File(with Record Time Setting)

Record Time Setting

Pre Alarm: 5 sec Post Alarm: 5 sec

Network Dis-connected

Dis-connected: ☐ Save to SD card

Network IP Check

IP Check: ☐ Enabled ☒ Disabled

IP Address: www.google.com

Interval: 30 sec

IP Check: ☐ Save to SD card

Apply

a. Motion Detection :

Video Server allows 3 areas motion detection. When motion is triggered, it can send the video to some specific mail addresses, transmit the video to remote ftp server, trigger the relay, and save video to local SD card. To set up the motion area, click "Area Setting". Using mouse to drag and draw the area. The same

operation for area 2 and 3.

- b. Record File Setting: IP CAMERA allows 3 different types of recording file to change its record size.
When motion/alarm is triggered, there are 3 different types of record mode.

1. AVI File (With Record File Setting)
2. Multi-JPEG (With Record File Setting), only with JPEG compression format.
3. Single JPEG (Single File with Interval Setting)

- c. Record Time Setting : Pre Alarm and Post Alarm setups for video start and end time when motion detected .

Note: Pre/Post Alarm record time is base on record time setting and IP Cam built-in Ram memory. Limited by IP Cam built-in Ram Memory, When information is too much or video quality set too high, it will cause recording frame drop or decrease on post alarm recording time.

- d. Network Dis-connected

When the network is down, it will save the video to local SD card. This function is only enabled in wire connection.

- e. Network IP check

For the use of recording software, IP CAMERA supports the detection of network connection. Whenever the connection is down, it records the video to SD card. To use this function, key in the IP address of the PC which is installed in the recording software, and enable the function of "Save to SD card", then click "Apply".

The interval of two video files recorded on SD card is fixed with 30 seconds.

- ii、 I/O Setting

When used as a Video Server supports 2 input/ 4 output. When input is triggered, it can send the video to some specific mail addresses, transmit the video to remote ftp server, trigger the relay, and save video to local SD card.

I/O Setting	
Input Setting	
Input 1 Sensor:	N.O
Input 1 Action:	☐ E-mail ☐ FTP ☐ Out1 ☐ Out2 ☐ Save to SD card
Input 2 Sensor:	N.O
Input 2 Action:	☐ E-mail ☐ FTP ☐ Out1 ☐ Out2 ☐ Save to SD card
Subject:	GPIO In Detected!
Interval:	10 sec
☐ Based on the schedule	
Output Setting	
Mode Setting:	☒ OnOff Switch ☐ Time Switch
Interval:	10 sec
Apply	

iii、 Log List

Log List	
System Logs	Logs
Motion Detection Logs	Logs
I/O Logs	Logs
All Logs	Logs

Sort by System Logs, Motion Detection Logs and I/O Logs. In addition, System Logs and I/O Logs won't lose data due to power failure.

iv、 SD card

Please Insert SD card before use it. Make sure pushing SD card into the slot completely.

Note : The use of the SD card will affect the operation of the



a. Playback :

Playback	
19700101	20060417
SD Card: << 878M / 982M >>	

1. It will show the capacity of the SD card. Click the date listed on this page. It will show the list of the video.

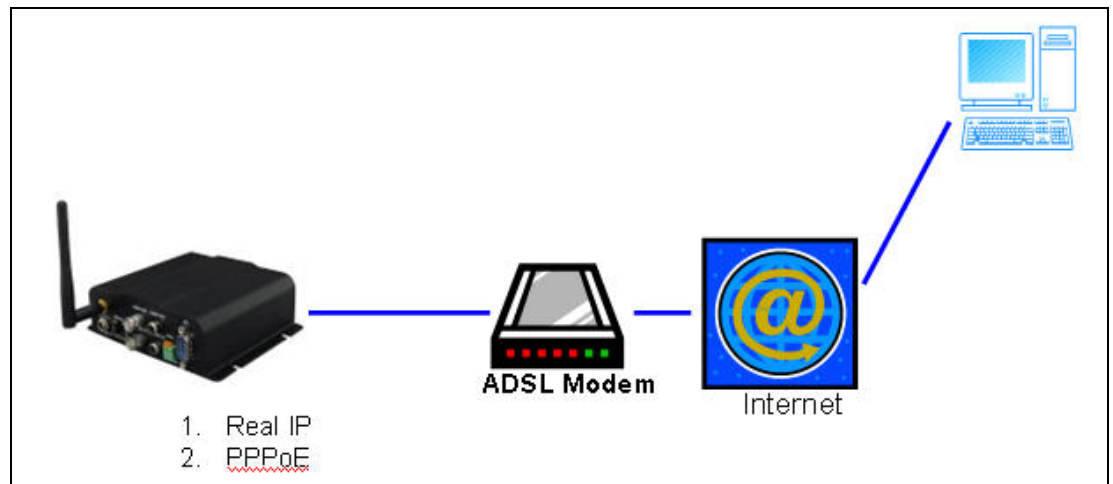
2006/04/17			Del
Time	Video	Event Type	☐
09:05:22	090522f.avi	Network Dis-connected	☐
09:05:52	090552f.avi	Network Dis-connected	☐
09:06:22	090622f.avi	Network Dis-connected	☐
09:06:52	090652f.avi	Network Dis-connected	☐
09:07:22	090722f.avi	Network Dis-connected	☐
09:07:52	090752f.avi	Network Dis-connected	☐
09:08:22	090822f.avi	Network Dis-connected	☐
09:08:51	090851f.avi	Network Dis-connected	☐
09:09:21	090921f.avi	Network Dis-connected	☐
09:09:51	090951f.avi	Network Dis-connected	☐

1 2 3 4 5

- The video format is AVI. Click the video to start Microsoft Media Player to play it.
- To delete the video, check it, then click **Del**. When the SD card is full, it will remove the oldest video automatically.

V. Network Configuration

i、 Configuration 1 :



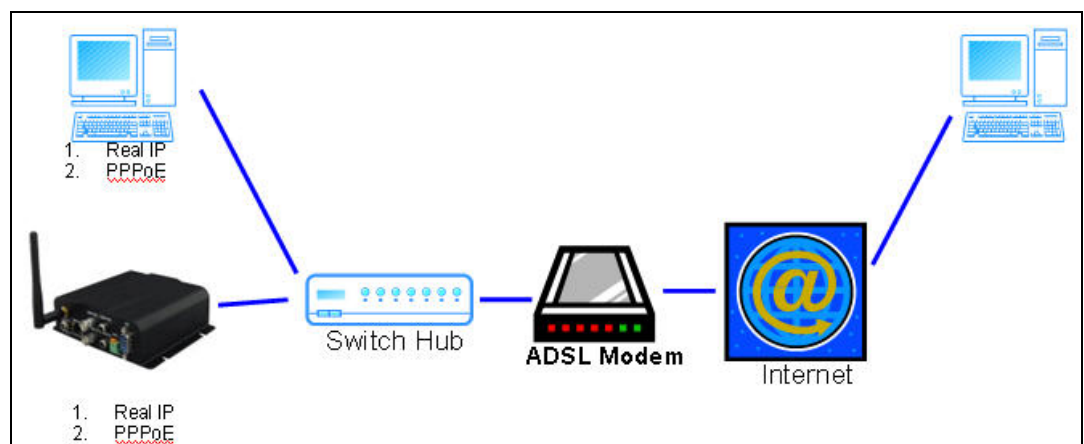
A. Internet Access : ADSL or Cable Modem

B. IP address : One real IP or one dynamic IP

C. Only Video Server connects to the internet

D. For fixed real IP, set up the IP into Video Server. For dynamic IP, start PPPoE.

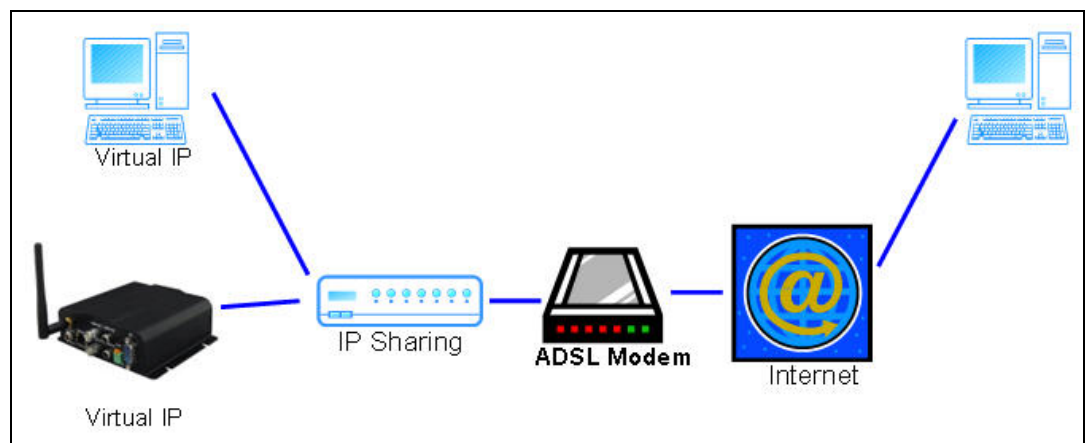
ii、 Configuration 2 :



a. Internet Access : ADSL or Cable Modem

- b. IP address : More than one real IP or one dynamic IP
- c. Video Server and PC connect to the internet
- d. Device needed : Switch Hub
- e. For fixed real IP, set up the IP into Video Server and PC. For dynamic IP, start PPPoE.

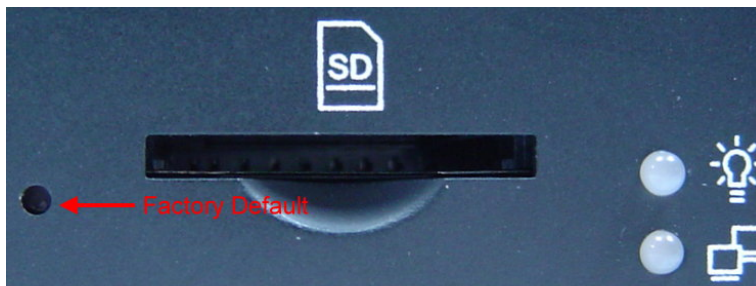
iii、 Configuration 3 :



- a. Internet Access : ADSL or Cable Modem
- b. IP address : one real IP or one dynamic IP
- c. Video Server and PC connect to the internet
- d. Device needed : IP sharing
- e. Use virtual IP, set up port forwarding in IP sharing.

VI. Factory Default

1. To recover the default IP address and password, please follow the following steps.
2. Remove power and press and hold the button in the back of Video Server.



3. Power on the Video Transceiver. Don't release the button during the system booting.
4. It will take around 30 seconds to boot the Video Server.
5. Release the button when Video Server finishes proceed.
6. Re-login the Video Server using the default IP (<http://192.168.1.200>), and user name (admin), password (admin).

VII. Package contents

1. Video Transceiver
2. Adaptor
3. Ethernet Cable
4. CD title (User manual, IP installation Utility)

Appendix I

SD Card Recommended :

SanDisk 128M	Transcend 128M 80X
SanDisk 256M	Transcend 256M 80X
SanDisk 512M	Transcend 512M 80X
SanDisk 1G	Transcend 1G 80X
SanDisk 2G	Transcend 2G 80X
SanDisk 4G	Transcend 4G 80X